

REMARKS

Claims 1-93 are pending in the present application. Claims 33-38 and 70-75 have been allowed. Claims 1-32, 39-69 and 76-93 stand rejected.

Applicants gratefully acknowledge the indication by the Examiner that claims 33-38 and 70-75 are allowed.

Applicants also gratefully acknowledge the indication by the Examiner that claims 16-22 and 63-69 recite patentable subject matter and have only been objected to. It is believed that the remarks herein place claims 16-22 and 63-69 in condition for allowance.

Claims 1-15, 23-32, 39-62 and 76-93 stand rejected under 35 U.S.C. § 103(a) as being obvious over United States Patent No. 6,223,061 B1 ("Dacus") in view of United States Patent No. 4,149,122 ("Parato").

Claim 1 recites, in part, a mixer comprising a track and hold circuit and a bandpass circuit. Neither Mole nor Hornak teaches a mixer comprising a track and hold circuit and a bandpass circuit.

In the Office Action mailed July 18, 2006, the Examiner alleges that Dacus discloses a mixer in FIGS. 2, 3, 9 and 10 and alleges that Dacus discloses a track and hold circuit in an active loop filter/sample and hold circuit 66.

Applicants respectfully submit that Dacus does not teach a mixer that includes a track and hold circuit as set forth, for example, in claim 1.

In other words, Dacus does not teach a track and hold circuit that is part of a mixer.

It appears that the Examiner's reliance on FIGS. 2, 3, 9 and 10 has been misplaced. As will be demonstrated, FIGS. 2, 3, 9 and 10 of Dacus do not illustrate a track and hold circuit that is part of a mixer OR a mixer that includes a track and hold circuit as set forth, for example, in claim 1.

In FIG. 2 of Dacus, an active loop filter/sample and hold circuit 66 is illustrated which is part of a frequency synthesizer (i.e., frequency synthesizing means 2). FIG. 2 of Dacus does **not** illustrate an active loop filter/sample and hold circuit 66 that is part of a mixer. (Recall that claim 1, for example, recites a track and hold circuit that is part of a mixer).

In FIG. 3 of Dacus, a passive loop filter/sample and hold circuit 7 is illustrated which is part of a frequency synthesizer (i.e., frequency synthesizing means 2). FIG. 3 of Dacus does **not**

illustrate a passive loop filter/sample and hold circuit 66 that is part of a mixer. (Recall that claim 1, for example, recites a track and hold circuit that is part of a mixer).

In FIG. 9 of Dacus, a first mixer 310 is illustrated as part of a receiver (i.e., receiving means 300) and a second mixer 316 is illustrated as part of an analog AFC means 302. However, FIG. 9 of Dacus does **not** illustrate a first mixer 310 or a second mixer 316 that includes a track and hold circuit. (Recall that claim 1, for example, recites a mixer that includes a track and hold circuit).

In FIG. 10 of Dacus, a first mixer 310 is illustrated as part of a receiver (i.e., receiving means 350) and a second mixer 316 is illustrated as part of an analog AFC means 352. However, FIG. 10 of Dacus does **not** illustrate a first mixer 310 or a second mixer 316 that includes a track and hold circuit. (Recall that claim 1, for example, recites a mixer that includes a track and hold circuit).

Thus, Dacus does **not** teach a track and hold circuit as part of a mixer and Dacus does **not** teach a mixer that includes a track and hold circuit as set forth, for example, in claim 1.

As alleged by the Examiner, Parato does not make up for the teaching deficiencies of Dacus.

For at least the above reasons, it is respectfully requested that the rejection of claim 1 and its dependent claims (i.e., claims 2-15 and 23-32) be withdrawn.

Claim 39 recites, in part, a mixer comprising a track and hold circuit and a bandpass circuit. Claim 61 recites, in part, a differential mixer comprising a track and hold circuit and a bandpass circuit. Claim 76 recites, in part, a mixer comprising track and hold means and limiting means. Applicants have already indicated above that neither Dacus nor Parato, as alleged, teaches a mixer or differential mixer comprising a track and hold circuit or track and hold means. Despite the allegations by the Examiner, Dacus does not teach a track and hold circuit or track and hold means as part of a mixer or differential mixer. And, as alleged by the Examiner, Parato does not make up for the teaching deficiencies of Dacus.

For at least the above reasons, it is respectfully requested that the rejection of independent claims 39, 61 and 76 and their dependent claims (i.e., claims 40-60, 62-69 and 77-93, respectively) be withdrawn.

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Response dated December 18, 2006
In Reply to Office Action of July 18, 2006

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-93 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: December 18, 2006

Respectfully submitted,

/Michael T. Cruz/

Michael T. Cruz
Reg. No. 44,636

McAndrews, Held & Malloy, Ltd.
500 West Madison Street, 34th Floor
Chicago, Illinois 60661
Telephone: (312) 775-8000
Facsimile: (312) 775-8100